

Title (en)
CONTROL CIRCUITS FOR SOLENOIDS

Publication
EP 0008509 B1 19830223 (EN)

Application
EP 79301576 A 19790803

Priority
GB 7834442 A 19780824

Abstract (en)
[origin: EP0008509A1] A solenoid control circuit includes a first switching element (11) which connects one side of the solenoid load (10) to earth via a current sensing resistor. The other side of the solenoid load is connected by a second switching element 14 to a supply rail (15). This second switching element is biased to conduct but can be turned off by either of two comparators (43, 44) which are connected to compare the voltage across the current sensing resistor with two different reference voltages. Each comparator has hysteresis and the circuit operates to that one comparator (43) operates to switch off the second switching element when a predetermined current level is reached and the other comparator (44) operates to switch the second switching elements on and off at lower current levels between said predetermined current level and the lower threshold level of the first comparator.

IPC 1-7
H03K 17/64; **H01F 7/18**; **F02D 5/02**

IPC 8 full level
H01F 7/18 (2006.01); **F02D 41/20** (2006.01); **F02D 41/30** (2006.01); **H01H 47/32** (2006.01)

CPC (source: EP US)
F02D 41/20 (2013.01 - EP US); **F02D 41/3005** (2013.01 - EP US); **H01H 47/325** (2013.01 - EP US); **F02D 2041/2017** (2013.01 - EP US); **F02D 2041/2058** (2013.01 - EP US)

Cited by
US5801516A; GB2173928A; EP0101850A3; US5903130A; US5267545A; GB2314177A; GB2314177B; GB2282469B; GB2213293A; GB2213293B; EP0319669A3; DE3741765A1; WO9522160A1; WO9014716A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
EP 0008509 A1 19800305; **EP 0008509 B1 19830223**; AU 4988279 A 19800228; AU 533423 B2 19831124; BR 7905331 A 19800520; CA 1131298 A 19820907; DE 2964900 D1 19830331; IN 151522 B 19830514; JP S5530892 A 19800304; US 4295177 A 19811013; ZA 794051 B 19800730

DOCDB simple family (application)
EP 79301576 A 19790803; AU 4988279 A 19790814; BR 7905331 A 19790817; CA 334312 A 19790823; DE 2964900 T 19790803; IN 880CA1979 A 19790824; JP 10732479 A 19790824; US 6464479 A 19790807; ZA 794051 A 19790806